

INTERNATIONAL SEARCH REPORT

International Application No
PCT/FR2004/002523

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F02D41/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F02D F01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 778 666 A (CULLEN MICHAEL JOHN ET AL) 14 July 1998 (1998-07-14) the whole document	1-6
A	EP 1 353 048 A (TOYOTA MOTOR CO LTD) 15 October 2003 (2003-10-15) the whole document	1
A	EP 0 892 158 A (VOLKSWAGENWERK AG) 20 January 1999 (1999-01-20) the whole document	1
A	DE 101 42 669 A (BAYERISCHE MOTOREN WERKE AG) 3 April 2003 (2003-04-03) the whole document	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *&* document member of the same patent family

Date of the actual completion of the international search 17 February 2005	Date of mailing of the international search report 24/02/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Aign, T

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR2004/002523

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5778666	A	14-07-1998	US DE DE EP JP	5704339 A 69724693 D1 69724693 T2 0803646 A2 9329047 A	06-01-1998 16-10-2003 08-04-2004 29-10-1997 22-12-1997
EP 1353048	A	15-10-2003	JP JP JP JP EP DE DE EP US	3518348 B2 2000018025 A 3446617 B2 2000064826 A 1353048 A2 69912535 D1 69912535 T2 0971101 A2 6205773 B1	12-04-2004 18-01-2000 16-09-2003 29-02-2000 15-10-2003 11-12-2003 19-08-2004 12-01-2000 27-03-2001
EP 0892158	A	20-01-1999	DE DE DE DE DE EP EP US DE EP US	19731131 A1 19731129 A1 19731624 A1 59807160 D1 59811702 D1 0891806 A2 0892158 A2 6164064 A 59809845 D1 0892163 A2 6053154 A	21-01-1999 21-01-1999 28-01-1999 20-03-2003 02-09-2004 20-01-1999 20-01-1999 26-12-2000 13-11-2003 20-01-1999 25-04-2000
DE 10142669	A	03-04-2003	DE	10142669 A1	03-04-2003